

REMARKS

This Amendment is responsive to the Office Action mailed November 13, 2009. With this submission, claims 1-2 have been amended, and claim 3 has been canceled. Claims 1-2, 4-12, and 13 are pending; claims 1-2 and 4-7 are under consideration; and claims 8-13 are withdrawn.

Support for the instant amendment can be found throughout the specification and claims as filed, e.g., at page 10, lines 5-27, and original claim 3. No new matter has been added. Reconsideration and withdrawal of the rejections made in the above-referenced Office Action are respectfully requested in view of the following remarks.

Claim Objections

The Office Action objects to claim 2 for recitation of “using the detected existence of Cochlin as an indicator of *the possibility* of a perilymph fistula” (emphasis added).

In response, and without acquiescing to the propriety of the objection, Applicants submit that the instant amendment is responsive to the present objection, and respectfully request withdrawal of the same.

Claim Rejections – 35 U.S.C. § 112, First Paragraph

The Office Action states the specification enables methods of detecting a perilymph fistula by detecting the existence of a 16-kDa N-terminal fragment of Cochlin using an anti-Cochlin N-terminal fragment antibody that recognizes an antigenic determinant contained within amino acids 36 to 127 of SEQ ID NO: 1. However, the Office Action rejects claims 1-7 under 35 U.S.C. § 112, first paragraph because the specification allegedly does not reasonably provide

enablement for methods of detecting a perilymph fistula by detecting the existence of any type of Cochlin, or by any means. In particular, the Office Action asserts at page 5, fourth paragraph that “there is evidence of substantial unpredictability” with respect to the Cochlin proteins which may penetrate into the perilymph from the inner ear. More specifically, the Action states that post-filing publications indicate that “only a single Cochlin isoform is actually present in perilymph, namely the 16-kDa N-terminal fragment now known as Cochlin-Tomoprotein” (see, e.g., Office Action at page 6, lines 10-12).

In response, Applicants submit that the specification provides sufficient guidance such that one of skill in the art could make and use the claimed invention without undue experimentation. Furthermore, and while not acquiescing to the propriety of any of the assertions made in the rejection of the claims under 35 U.S.C. § 112 (enablement), Applicants respectfully submit that the amendment addresses the instant rejection. Applicants have, for example, amended claim 1 to recite

“[a] method for detecting a perilymph fistula, which comprises

detecting the existence of Cochlin in body fluid existing in the middle ear, and using the detected existence of Cochlin as an indicator of a perilymph fistula, wherein the detection of the existence of Cochlin is carried out by detecting the existence of a protein consisting of:

an N-terminal fragment of a p63 isoform of Cochlin, or

a 16kDa N-terminal fragment of Cochlin recognized by an anti-Cochlin N-terminal fragment antibody.”

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Furthermore, Applicants submit that Ikezono et al. *BBRC* **314**:440-446, 2004 discloses that “[i]n human and bovine perilymph, all four antibodies detected proteins of 60-63 kDa...” (page 445, first column, first full paragraph). Moreover, Figure 8 of the instant specification discloses the presence of the p63 isoform in perilymph. Thus, contrary to the Office’s assertion, post-filing publications do not indicate that only a single Cochlin isoform is actually present in perilymph. Rather, post-filing publications as well as the instant specification indicate that at least at least a 16kDa and 63 kDa isoform may be found in the perilymph.

With respect to claims 6-7, Applicants further submit that the claimed subject matter therein encompasses detection of the p63 isoform and as well as a 16 kDa N-terminal fragment, but not detection of the p44 or p40 isoforms. Thus, Applicants submit that the specification provides sufficient guidance such that one of skill in the art could also make and use the claimed subject matter of claims 6-7 without undue experimentation.

Based on at least the foregoing, Applicants submit that the instant disclosure provides clear and sufficient guidance such that the claimed invention is enabled. Applicants respectfully request reconsideration and withdrawal of the rejections under the enablement requirement of 35 U.S.C. §112, first paragraph.

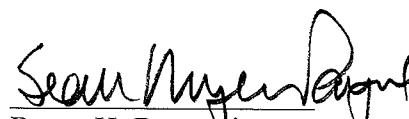
CONCLUSION

In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejections of record, and allow all the pending claims.

No additional fee is believed due at this time. If, however, any additional fee is necessary to ensure consideration of the submitted materials, the Patent and Trademark Office is hereby authorized to charge the same to Deposit Account No. 19-0089.

Should there be any questions, the Examiner is invited to contact the undersigned at the below listed telephone number.

Respectfully Submitted,
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